JPRS-UEA-86-028 14 AUGUST 1986

## **USSR** Report

**ECONOMIC AFFAIRS** 



FBIS FOREIGN BROADCAST INFORMATION SERVICE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are \*translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service (NTIS), Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in <u>Government Reports Announcements</u> issued semimonthly by the NTIS, and are listed in the <u>Monthly Catalog of U.S. Government Publications</u> issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

rrespondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

Soviet books and journal articles displaying a copyright notice are reproduced and sold by NTIS with permission of the copyright agency of the Soviet Union. Permission for further reproduction must be obtained from copyright owner.

JPRS-UEA-86-028 14 AUGUST 1986

## USSR REPORT ECONOMIC AFFAIRS

### CONTENTS

ECONOMIC POLICY, ORGANIZATION AND MANAGEMENT	
Party's Economic Development Strategy Highlighted (PLANOVOYE KHOZYAYSTVO, No 5, May 86)	1
Academy Jurist Discusses Economic Self-Management (Yu. Lmkhomirov; SOTSIALISTICHESKAYA INDUSTRIYA, 4 Jul 86)	ç
PLANNING AND PLAN IMPLEMENTATION	
Revision of Production Cost Planning Methodologies Urged (G. Sokolovskaya; PLANOVOYE KHOZYAYSTVO, No 4, Apr 86)	14
INDUSTRIAL DEVELOPMENT AND PERFORMANCE	
Poor Capital Productivity Revealed, Extra Shifts Proposed (A. Fateyev; SOTSIALISTICHESKAYA INDUSTRIYA, 3 Jul 86)	25
RESOURCE UTILIZATION AND SUPPLY	
Economist Examines New Wholesale Trade Procedures (V. Belkin; SOTSIALISTICHESKAYA INDUSTRIYA, 4 Jul 86)	29

#### REGIONAL DEVELOPMENT

	Experts Reassess Industrial Potential of Ural Region	
	(M. Sergeyev, N. Talalayev; PALNOVOYE KHOZYAYSTVO,	33
	No 4, Apr 86)	3.
/12223		

#### ECONOMIC POLICY, ORGANIZATION AND MANAGEMENT

PARTY'S ECONOMIC DEVELOPMENT STRATEGY HIGHLIGHTED

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 5, May 86 pp 3-8

/Unsigned article: "The Strategic Course of the Country's Economic and Social Development."

/Text7 The 27th CPSU Congress approved in its entirety the concept developed by the Central Committee of the party for accelerating the country's social and economic development. Henceforth, the policy of acceleration became a law of party life and the guiding principle for operations in the national economy.

The essence of its meaning was expressed in the Political Report of the CPSU Central Committee to the 17th Party Congress: "Acceleration of the country's social and economic development is the key to all our problems -- short-term and long-range, economic and social, political and ideologoical, domestic and foreign. A qualitatively new stage in Soviet society can and must be reached only by such a path". (Footnote 1) (Gorbachev, M. S. Political Report of the CPSU Central Committee to the 27th Congress of the Communist Party of the Soviet Union, 25 February 1986, Moscow, Politizdat Publishing House. 1986, p 27)

The highest goal of the party's economic strategy was and remains steady improvement in the material and cultural living standard of the people. Realization of this goal in the forthcoming period demands accelerated social and economic development and maximum intensification and increased efficiency of production on the basis of scientific and technical progress.

Solution of the problems which have been posed will be accomplished by increasing the rates and efficiency of economic development through accelerated scientific and technical progress, through retooling and renovation of production, through intensive utilization of established production potential, and through improvement in the administrative system and the management mechanism. An important role in this will be played by the fulfillment of special-purpose complex programs -- the Food Program, the Energy Program, the program for developing machine building, the program for use of chemicals in agriculture, and the program for developing consumer goods production and the services sphere.

Special importance is ascribed to successfully fulfilling the 12th Five-Year Plan as the first and extremely crucial stage in practical realization of the party's long-range economic strategy.

The place of the 12th Five-Year Plan within the total strategy is a result not only of the utilization of long-term acceleration factors, most importantly scientific and technical progress, but also of the mobilization of reserves having a short-term effect, in order to win time necessary to accomplish deep-going social and economic transformations. /Begin italics/ In the first instance, this means full utilization of existing capacities, particularly in machine building, the power industry and agriculture, increased discipline in deliveries, rational utilization of labor resources, restructuring the psychology of economic operation and, most important, improving production quality within the framework of existing technological capabilities. /End italics/

That such reserves exist and that they can be effective, even today, is shown by the operating results of industry during the first three months of this year. Froduction volume increased by 6.7 percent in comparison with the first quarter of 1985 while labor productivity grew by 6.3 percent (while the annual plan calls for increases of 4.3 percent and 4.1 percent respectively). These figures not only characterize positive shifts in industry compared with the relatively low level at the unfortunate start of last year, but also serve as a real confirmation of accelerated industrial production growth tendencies.

/Begin italics/ A characteristic feature of the present stage of building communism is the reinforcement of a social orientation as a direct strategic goal of the country's economic development. With this, not only are possibilities for improving national well-being dependent upon growth of the economy, but also rates of economic progress and the fulfillment of plans increasingly turn out to be dependent upon the influence of social factors. The most important characteristic of social planning under modern conditions is that the processes of developing the social sphere are being approached as a unified whole. In this context, increased well-being is inseparably tied to improvement in the working and social performance of each worker and of each production collective. /End italics/

The interests of the country's social and economic development demand further improvement in the conditions of labor, an increase in its creative character, and a fundamental reduction in the use of heavy manual work. During the 12th Five-Year Plan, the scale and rates of its reduction will double or triple at a minimum, and during the next 15 years more than 20 million people will be freed from low-skilled work to perform more substantive work. Even during 1986-1990, the level of automation in the national economy will double on the average, the supply of industrial robots will triple, and other important measures will be taken to fundamentally transform places of work. By the year 2000, it is planned to complete complex mechanization in all sectors of the national economy and to accelerate automation of production.

Improvement in the system of wages and establishment of a stricter relationship of pay with labor productivity and with labor quality indicators are of enormous social significance. A basically new approach has been developed to raising wage and salary scales in material production sectors on the basis and within the limits of the internal sources of enterprises. In the nonproduction sphere, growth of wage rates and salary scales will be financed from centralized sources.

Increased popular well-being presupposes full satisfaction of the population's demand for high-quality and varied consumer goods. During the coming 15 year period, it is planned to achieve or basically approximate scientifically based norms and standards for rational consumption of the most important food and non-food products and for certain kinds of paid services, while also improving their quality and variety.

There is a great deal of economic and social justification for setting such a significant task. National income, used for consumption and accumulation, increased 1.8-fold during 1971-1985, while per capita real wages grew 1.6-fold. The production and consumption of food products, clothing and footwear increased. The extent to which products intended for long-term use have been made available to the public has noticeably increased. Satisfaction of the demand for many manufactured articles has been achieved. The private property of Soviet citizens comprises approximately one-fifth of the national wealth. At the present time, more than 60 percent of the population has a monthly income of 100 rubles or more per family member and by the end of the 12th Five-Year Plan the average monthly income of more than 50 percent of all families will come to more than 125 rubles per capita. Under these conditions, the quantitative side of improving well-being essentially takes a back seat. The solution of more complicated problems -- concerning the quality of goods and services and true rationalization of popular consumption -- moves to the front.

These problems will be solved during the upcoming five-year plan by intensifying preferential development of group "B" industry over group "A". By the year 2000, the volume of retail trade will increase 1.8-fold while paid services available to the population will grow from 2.1 to 2.3-fold.

A goal has been set to ensure rational food supply to the population and to achieve larger shifts in the structure and quality of nutrition than in preceeding five-year plans. Achievement in 1990 of the level of production set in the USSR Food Program will make it posible to improve the supply of meats and milk products, vegetables and fruits to the population. The policy of sharply reducing production and sale of alcoholic beverages will be rigorously maintained and this will create conditions for a final turning point in habits which have developed.

Another priority goal over the long run is solution of one of our most fundamental social problems -- the housing problem. It is envisaged that enough

housing will be made available in urban and rural localities by the year 2000 to make it possible, with rational utilization, to furnish practically every family a separate, well-built apartment or individual home. At the present time approximately 110 million square meters of living space are being made available each year within the country. It is planned to build 565-570 million square meters of total living area during the next 5 years. Altogether during 1986-2000, no less than two billion square meters of total living area are to be opened for occupancy, as against a little more than 1.6 billion square meters during the prece ding 15 years.

The problem of creating a unified system of continuous education must also be solved. With this aim, the reform of general education and professional schools will be consistently implemented and a reorganization of higher and secondary specialized education will be carried out; training and utilization of specialists will be perfected and the system for retraining and increasing the qualifications of personnel will be improved. During the years of the 12th Five-Year Plan it is intended to create 7 million new study places, which will make it possible to make a transition to 11-year education, beginning at age 6, to begin gradually reducing the number of students in each class, and to increase the number of school children studying in the first shift.

The party is proceeding from broad social positions in its approach to protecting and improving peoples' health and to increasing the length of their active lives, which depend upon living and working conditions, the level of well-being and, of course, on development of the public health system. It is first of all planned to strengthen the preventative activities of the medical services system, improving their quality with the aim of beginning a gradual transition to yearly clinic visits by the entire population. No other country in the world has set such a task for itself. For this purpose, along with other measures, the construction of outpatient clinics and the production of medical equipment are being developed on an accelerated basis. The main thrust of developing in-patient treatment will not be aimed at expanding the network of hospitals, but rather at strengthening the material and technical base of existing hospital facilities.

Solution of the social problems that have been posed is inconceivable without accelerating /Begin italics/ rates of economic growth /End italics/. Moreover, every percentage point of growth must be backed up by high-quality, effective products, with excellent consumer qualities, which are needed by the national economy and the population. Herein lies the sense of the central question of the party's economic policy -- /Begin italics/ the question of rates /End italics/.

Acceleration is the determining factor behind the increase in average annual national income growth rates from 3.1 percent during the 11th Five-Year Plan to

5 percent during the 14th. Total national income planned for production during the years of the three forthcoming five-year periods amounts to 12 trillion rubles, which exceeds the total national income produced during the entire previous history of the Soviet Union. This will permit solution of the large-scale problems of the country's social and economic development while simultaneously maintaining the country's defense capabilities at the necessary level.

However, rates are only a form of manifestation of acceleration. Its essence lies in the new quality of growth, which primarily results from basic restructuring of production, from its all-round and consistent intensification. The structural changes have as their goal a transition to proportions that correspond to growing and changing social requirements.

/Begin italics/ The main direction of these structural changes is resource conservation /End italics/, the more rapid development of the processing sector as compared to the raw-materials sector. /Begin italics/ Even during the 12th Five-Year Plan, production growth rates in industrial processing sectors will be twice as high as in the fuel and raw-material sectors /End italics/. Sectors producing the most progressive producer and consumer goods -- machine building, chemistry and electric power -- will receive preferential development. Their share in the total volume of industrial production will grow to 41 percent by 1990, as compared to 37.5 percent in 1985.

The stress being given to the problem of intensification is a product not only of the need for significant changes in the economy, the need to inject it with necessary dynamism, but also of the possibility of utilizing the main means for its solution -- a fundamental acceleration of /Begin italics/ scientific and technical progress /End italics/ in practical activity. It will be accomplished by implementing a unified scientific and technical structural and investment policy, the potential effectiveness of which is especially high under conditions of a planned economy.

It is clear that acceleration of scientific and technical progress in all sectors of economic activity requires fuller utilization of the scientific potential afforded by the leading position of Soviet science in many important areas of science. However, certain sector ministries quite often try to purchase ready-made technical solutions abroad, while paying insufficient attention to assimilating progressive Soviet technology. Only a third of the inventions registered every year are finding practical application.

Solution of this problem will facilitate a transition to all-round planning of scientific and technical progress. This presupposes the careful selection of directions for scientific research and the introduction of technical achievements, the establishment of a list of the most important objects of research, construction and production, and the singling out of promising base technologies, particularly in machine building, which are organically connected

with plans for reshaping the national economy. The Complex Program for the Scientific and Technical Progress of the CEMA Member Countries to the Year 2000 serves as a long-term guide post in this work. This program moves to the forefront such technological directions as electronization and complex automation of the national economy, accelerated development of nuclear power, creation and assimilation of new materials as well as of technologies for their production and processing, and expansion of areas for the use of biotechnology. It is also planned to do a great deal to better organize the activities of scientific research institutions.

Progressive transformations in the sphere of science and in production will make it possible to considerably raise /Begin italics/ labor productivity /End italics/ growth rates during the 12th Five-Year Plan, while two-thirds of this growth will be achieved on account of assimilating new equipment and technology. During the following decade it is planned to more than double the average annual labor productivity growth rate achieved during the 11th Five-Year Plan. As a result, material production will be increased. Simultaneously, workers will be freed and the structure of employment will be fundamentally altered throughout the national economy.

The material basis for the intended changes and the only effective means capable of synthesizing all the main directions of economic policy is /Begin italics/ the technical reconstruction of the national economy /End italics/, which is called upon to create the multifaceted prerequisites for intensification of the economy and for solving important social questions.

The priority allocation of funds for rebuilding and retooling operating enterprises corresponds to this. The share of production capital investments designated for these purposes will increase from 37 percent in 1985 to 50 percent in 1990. This will not only make it possible to increase the overall effectiveness of capital investments, but also to win time for assimilation and high-quality use of capacity.

The replac ement rate of the operating production apparatus, particularly of its active part, will grow considerably in connection with this. During the 12th Five-Year Plan, as compared with the 11th, retirement of obsolete fixed production capital will double and the coefficient of withdrawel will grow to 5-6 percent per year, which will ensure achievement of the planned level of national economic effectiveness, will limit repair costs and, as a whole, will reduce the proportion of metal working within the total production structure of the machine building complex. This will also make it possible to replace a third of the active part of fixed production capital in the next five years.

A special characteristic of the sector aspect of changes in investment policy is the increased role of the /Begin italics/ machine building complex /End italics/. Capital investments in it will grow 1.8-fold during the 12Th Five-Year Plan and their growth rate will be more than three times greater than the growth rate of all production capital investments. Annual replacement of the active

part of fixed production capital will reach 10-12 percent. This will make it possible within short periods of time to restructure machine building itself and then, in the future, to transform it from the first-priority object into the primary mechanism of reconstruction.

Creation of the material prerequisites of /Begin italics/ intensification /End italics/ does not in itself exhaust all the reserves that exist in our economy for increasing effectiveness. Recognition by all members of society of the need to restructure the psychology of economic management has taken on decisive meaning at the present time. This means activating the human factor and raising the level of management of the national economy.

A strengthening of the role of the human factor and reorganization of the administration of the national economy comprise an important reserve for acceleration. At the same time, /Begin italics/ a special feature of the 12th Five-Year Plan /End italics/ is that it calls for setting about retooling the national economy without reducing rates of social and economic development, using these reserves to a maximum degree.

The special status of the 12th Five-Year Plan as a period during which the economy must be changed over to a higher level of development demands a significant increase in the level of investment activity, first of all in the sphere of production construction. While the volume of production /Begin italics/ capital investments /End italics/ grew by 16 percent during the 11th rive-Year Plan as compared to the level of the 10th Five-Year Plan, with a total growth of 17 percent, now during the 12th Five-Year Plan, it is planned to increase investments in the production sphere at preferential rates and to raise their growth to 25 percent, against an 18-22 percent increase in the volume of all capital investments. This will lead to an increase in the share of the accumulation fund within the structure of national income, which will ensure accelerated reconstruction of the national economy.

The 12th Five-Year Plan will also be a watershed in the area of /Begin italics/material savings /End italics/. Almost two-thirds of the increased demand for the most important resources will be satisfied on the basis of savings, which will make it possible to double amounts saved in material expenditures in the national economy during the five-year period. One of the most important reserves for savings in raw materials and materials is maximum utilization of secondary resources. It is planned to increase the relative share of secondary raw material within industrial consumption to 10-12 percent, which will make it possible at the same time to solve a number of problems connected with environmental protection.

The 12th Five-Year Plan must become a turning point in solving the problem of Begin italics/ quality /End italics/. The question of quality has long since outgrown economic limits and has ceased to be a local problem involving the mutual relationships of individual producers and consumers. It has acquaired a political ring. Today, the forward progress of Soviet society in practically

all directions depends upon its solution. "The national economy has reached a point", it was noted at the 27th CPSU Congress, "where not a single important production and social problem can be solved without a basic improvement in the situation with regard to quality". (Footnote 2) (Ryzhkov, N. I., Basic Directions of the Economic and Jocial Development of the USSR during 1986-1990 and in the Period to the Year 2000: An Address to the 27th CPSU Congress, 3 March 1986, Moseow: Politizdat Publishing House, 1986 p 22)

The problems of quality and quantity are closely bound together under conditions of growing resource limitations. With the enormous efforts which are being made to increase the efficiency of all production factors, the manufacture of products which are of poor quality or are not needed by the consumer is not simply dissipation of funds, but is a direct violation of national economic proportions. Thus, millions of meters of fabric, pairs of leather shoes, and other mass consumer goods are returned to enterprises every year or are downgraded to lower quality categories. The use reliability of many types of everyday products is low: every third color television set, every sixth tape deck, and a large quantity of radios, refrigerators and washing machines must be repaired during the guarantee period alone. It has therefore become a problem of first importance to use the economic mechanism to halt the manufacture of products which fail to meet modern requirements and to spur on working collectives, the quality of whose products will guarantee their effective use. The problem of basically improving the situation with regard to quality har prompted a need to pass a special law concerning output quality.

The 12th Five-Year Plan characterizes the continuity of the past and future stages in the social and economic development of the country. The drawing of conclusions from the lessons of the past is the main link in this continuity. The significance of the new five-year plan is determined by its role as the first stage of acceleration, a stage when the Soviet economy is entering a new, higher trajectory of growth.

COPYRIGHT: Izdatelstvo "Ekonomika"/"Planovoye khozyzystvo", 1986

13032

CSO: 1820/156

#### ECONOMIC POLICY, ORGANIZATION, AND MANAGEMENT

#### ACADEMY JURIST DISCUSSES ECONOMIC SELF-MANAGEMENT

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 4 Jul 86 p 3

[Article by Yu. Lmkhomirov, professor, doctor of legal sciences, head of the Department of Law and the Psychology of Administration, USSR Academy of the National Economy, Moscow: "Self-Management in the Economy: The 27th CPSU Congress Concerning the Expansion of the Rights of Labor Collectives". Capitalized passages appear in boldface in original]

[Text] Until recently self-management was viewed chiefly as something in the distant future, as a remote goal. The 27th CPSU Congress has pointed out that already the outcroppings of real self-management have appeared and have become stronger in social life. Self-management has been recognized as a phenomenon that is inherent in both phases of the communist formation. And although the complete carrying out of self-management is a job for tomorrow, for the future, the foundations are already being laid today.

While planning the paths for the formation and development of socialist selfmanagement, the 27th CPSU Congress placed special emphasis on self-management in the economy. Why was that? Well, the management of the economy has always been based on the principle of one-man management. One could see there a reliable obstacle to anarchy in production, to disorder. irresponsibility. But will self-management undermine that obstacle? means. It not only does not contradict the principles of democratic centralism in the administration of socialist production, but also makes it possible more deeply to ascertain its potential, and contributes to the reinforcement of discipline in complete conformity with the Leninist principle of one-man management and joint action. "The joint discussion and resolution of all questions of administration," V. I. Lenin wrote, "must be accompanied by the establishment of the most precise responsibility borne by EVERYONE INDIVIDUALLY... for the FULFILLMENT OF DEFINITE assignments and PRACTICAL operations which are clearly and unambiguously outlined."

The possibility of self-management in the economy is part of the very nature of socialism. Socialist property and the social nature of labor presuppose, according to the thought of K. Marx, that association of producers who participate both in administration and in production. However, at the lower phase of communist society, it is not they, but the state agencies, that are in charge of socialist property. So the impression is formed that the workers

are alienated from property, and fulfill only the will of those administrative agencies. But this is only an impression. Any state agency, which, by its essence, is an agency of the people's authority, is reportable directly to the nation or to its representatives, and it acts in the interests of the workers. The problem here lies elsewhere -- it is a problem of to what extent and in what manner the workers themselves have a self-interestedness in the better use and multiplication of social property. Putting it more simply, it is a matter of how developed a person's sense of his being one of the owners of his country is.

It is naive to think that this sense can be inculcated by discussions or appeals. Like the actions that evolve from it, it is formed by the conditions in which the person lives and works, by those capabilities that he has for exerting a specific influence upon the planning and organization of production, upon the distribution and consumption of the results of his labor. In the Political Report of the CPSU Central Committee to the 27th CPSU Congress it is emphasized, "It is important to implement strictly the principle according to which the enterprises and associations are completely responsible for operating without incurring any losses, The state does not bear any responsibility with regard to their pledges." Consequently, in order to be one of the owners of one's country, to be in charge of its property, it is necessary first of all to be one of the owners at one's work station, at one's own plant, in the shop, in the brigade. And here special importance is attached to the law currently being developed, the law concerning the socialist enterprise (production association), which was mentioned at the June 1986 Plenum of the CPSU Central Committee. That document must legislatively protect the labor collectives against petty guardianship and administration by fiat.

If one thinks carefully about it, the deeply underlying essence of self-management is not in unilateral requirements made upon the management of the enterprises, but in the fact that it necessary for oneself to be concerned about increasing the contribution made by one's collective to the social property and to be personally responsible for any losses -- by one's share of the income. From this point of view self-management is one of the motivating forces for accelerating the country's socioeconomic development. It must completely encourage the conscientious attitude and initiative of the workers, increase their rate of labor participation, and in the final analysis give them a direct self-interestedness in the high organization and effectiveness of labor.

The chief "field" for self-management is in the labor collectives. The measures to expand their rights are aimed at assuring the delegating to them of some of the functions of the administrative agencies -- in the area of the planning of production, social development, and the organization and providing of incentives for labor. Previously, for example, the collective was only familiarized with the approved plan, and was given the responsibility only of executing what had been assigned. It is a different situation today. The workers are taking part in the development of plans, are making their own recommendations, and are assuming counterpledges. And it is not until this is done that the plans are sent to the ministries for approval.

There has also been an increase in the role of collectives in the resolution of purely production questions. Take, for example, the brigade contract. The workers themselves determine how, with what manpower, and with expenditures they will fulfill a state assignment. The payment of labor is completely dependent upon the quality and quantity of the work fulfilled. I emphasize that it is dependent upon quality, which is especially important today.

The large-scale economic experiment in industry has become an important stimulus in the development of self-management at the level of enterprises and associations. In accordance with the new management conditions, the collectives themselves determine their own technical policy and resolve questions of renovation and remodeling on the basis of long-term norms. At meetings of party members and economic activists, it is necessary to analyze the state of shipments and to hold strictly accountable anyone who violates contract-planning discipline. Such discussions must help everyone to analyze better both his own work and the work being performed by those who are involved in joint operations with them, and to learn how to search for forms of closer interaction with one another. I especially emphasize the fact that the collectives that are working under the conditions of the experiment can also form their own social policy: they can independently decide how to use the material incentive fund, and how to spend the money in the fund for social, cultural, and everyday purposes.

Understandably, life does not stand still. The development of the economic experiment has led to self-financing, to the deepening of cost accountability — the economic basis of self-management. The experience of the Sumy Machine Building Scientific-Production Association imeni M. V. Frunze and of AvtoVAZ attest to the fact that when the collective's rights are not only proclaimed, but are also guaranteed by the economic mechanism, self-management is supplemented by real content and become an everyday practice.

But is everyone ready to use the advantages of the qualitatively new type of self-management in the economy? Does everyone have enough political and economic know-how and professionalism? Because the democratic principles of administration cannot be implemented simply by the sweep of a pen, by an order "from the top." They must be introduced by overcoming the narrowness of departmental and group interests, and by overcoming passivity and inertia in mental processes.

Not all economic managers, for example, know how to resolve collectively the administrative questions, to support the social institutions of self-management, or to rely upon them. I know from my own experience that frequently they demonstrate a lack of elementary knowledge concerning the Law Governing Labor Collectives, and do not even have an idea of what powers mentioned in them have already been given to the workers. Another hindrance is the psychological mind-set that had developed over the years, the habit of using one's willpower to resolve everything. And, finally, the collectives themselves are not always ready to implement the right to self-government. There is a lack of successivness, persistence, and sometimes even civic boldness, the ability to assume personal responsibility. Unfortunately, not

infrequently real live work with the masses, their real involvement in the administration of production, is replaced simply by the appearance of activity.

In recent years we have spoken a lot about the need to have elections and a competitive system in filling job assignments. This is an important democratic innovation, the introduction of which will reinforce the mass base of the administrative links. The experience of a number of enterprises in Riga and Voronezh provides convincing proof in favor of electing line personnel by secret ballot. Performance appraisals of workers that are based on the results of their labor can be just as beneficial. At the Elektrosila Association in Leningrad, these performance appraisals have been made regularly and have been yielding good results. In making the appraisal, the appraiser evaluates the person's creative initiative, professional skills, independence, the promptness of the fulfillment of operations, and his authority. Subsequently, it will obviously be necessary to combine the procedures involved in the election, competition, and certification of workers.

At the present time, when we speak of self-management in the economy, we usually have in mind the development of the democratic principles chiefly in the primary production link, and that is correct. And yet, much depends upon the extension of them to higher levels -- regional and branch. Here too there have been definite shifts. For example, there has been an intensification of the attention paid by the local Soviets to questions of the economy, and an increase in the active participation of the permanent commissions "in the economic area of specialization" and the deputies themselves. In addition, the central agencies of economic administration, in their decisions, orient themselves more and more frequently on the initiative of the labor collectives. But, apparently, the time has also come to think a bit about the democratization of their organizational structure. For example, at the first stage it would be possible to form the branch administrative links in such a way as to guarantee broad representation in them of the production and scientific-production collectives. In the branch ministries it is completely possible to expand the principles of joint action by increasing the authority and role of the directors' councils and the problem-oriented and scientifictechnical councils in working out the fundamental administrative decisions.

We already have this kind of experience. The Ministry of the Automotive Industry has a successfully operating branch council for questions in the creation, development, and introduction of automated design systems. It is made of managers of the NII [scientific-research institutes] and the chief designers at associations and plants. Why not use that experience in other branches of the economy?

In a word, the decisions of the 27th CPSU Congress have opened up new opportunities for the development of self-management in the economy. They are linked with the fundamental reorganization of the economic mechanism, with the expansion of the independence of the enterprises, and the increase in the responsibility borne by the collectives for the results of their labor. Democratization in the administration of production, in the final analysis,

must exert an influence upon the outward appearance of the worker himself, regardless of what kind of work he is doing, or where. The new management methods have been aimed specifically at persons who have initiative, who are creative and bold, and who are capable of influencing the future of our economy.

5075

CSO: 1820/164

#### PLANNING AND PLAN IMPLEMENTATION

#### REVISION OF PRODUCTION COST PLANNING METHODOLOGIES URGED

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 4, Apr 86 pp 75-83

[Article by G. Sokolovskaya, candidate of economic sciences: "On the Methods of Planning Production Cost"]

[Text] A regimen of economy is one of the most important factors in the intensification of production. At the 27th CPSU Congress a task was set to economize in everything and at all times—in production and in daily life—and not to indifferently overlook inefficiency and extravagance.

Under the conditions of the expanded economic independence of enterprises and associations the role of a regimen of the economy is increasing even more. Under the 12th Five-Year Plans the increase in the national economy's need for fuel, energy, raw materials and processed materials is to be satisfied by 75-80 percent as a result of economizing on them. At the same time it is planned to essentially reduce production expenditures in individual branches, for example, in the machine-building complex by 9-11 percent, the chemical and petrochemical industry--7-9 percent, and in other branches of the processing industry--from 2 to 5 percent.

This is precisely why the indicator characterizes the amount of savings on resources—the production cost of the products—now requires constant attention. If one adds to this the fact that the production cost is one of the basic planning, evaluating and fund-forming indicators and that it is used in calculations of the economic effectiveness, the importance of a correct determination of its actual and planned level becomes obvious. This is impeded to a certain degree by the existing shortcomings and the practice of planning which, moreover, do not contribute to a reduction of the level of the production cost of products.

Problems of improving the planning of production cost have been elucidated fairly extensively lately in economic literature. But frequently they are reduced to a consideration of the problems of forming the indicator of the production cost (that is, which items of expenditures to be included in this indicator and the methods of calculating them) which is done on the basis of existing methodological provisions concerning planning, accounting and calculation, and, on the basis of this, also to a discussion of the shortcomings of the latter. These questions are undoubtedly important, but

this is only of the overall problem. In these cases one bypasses such things that pertain to planning of the production cost as the process of the establishment of assignments concerning this indicator: the forms and methods of their construction, the policy for the organization and the way the calculations are conducted. At the same time in the planning of the production cost up to this point there are many "blank spots" and there is space for further improving it.

One of the leading directions for improvement is related to the need for a comprehensive approach to the development of this section of the plan concerning the production cost, taking into account its special role as a generalizing indicator of the activity of the production units. This section is linked to all the other sections of the annual and five-year plan. On the one hand it is developed as one of the final sections, after the basic indicators of the other sections become known, and, on the other, the latter in the process of calculations of planning assignments should be coordinated and made to agree with indicators that characterize production outlays.

Unfortunately, the interconnection of all sections of the production plan with the section for production cost is not always accomplished to the fullest degree: data from other sections are used by planning services of production units in calculations basically in the stage of drawing up the plan. After its consideration by the ministry the intercoordination of the indicators of various sections of the plan in the VPO, the PO and at enterprises is not always carried out in all cases. The refinements made in the initial draft of the plan for production cost, as a rule, are related only to changes in the section entitled "Production and Sales of Products." Especially rare are cases of "counter" adjustment of other sections of the draft of the plan when there are changes (reductions) by decision of the ministry of the level of the production cost of products for associations and enterprises as compared to that which was previously projected. Thus the all-union industrial association in this case usually does not revise the entire draft of the production plan in order to seek out additional reserves for reducing reproduction cost as a result of improving the utilization of raw material resources, fixed production capital and so forth, but establishes for the enterprises and production associations under its jurisdiction higher assignments for reducing outlays for their production, arbitrarily determining the difference that arises in the levels of the indicator as projected and as established by the VPO.

The draft of the plan is formulated in the branch in approximately 8-9 months, but an extremely short period of time is allotted to calculate the additions and changes made in the last stage of its development (actually before the approval itself). As a result, the approved plan sometimes turns out to be less balanced and substantiated than the initial draft although it has reflected certain refinements in the draft and additional production possibilities.

In order to avoid such a situation it is necessary to coordinate all sections of the plan throughout all stages of its compilation and approval. To this end, and also taking into account the changes in the economic conditions, including a refinement of the indicators of the products list and the

assortment of products, one should do variant calculations of the plan, including when its draft is being prepared. In our opinion, these should be based on data concerning changes in the indicators of expenditures depending on various given values of technical and economic indicators of the activity of the production units. This will serve as a reliable instrument for control over the degree of substantiation of the drafts of the plan that are submitted by the enterprises (PO's) and will make it possible to foresee the consequences of adjustments that are made in individual indicators (sections of the plan) and provide the opportunity to take these into account on the spot.

Experimental calculations of this kind were done in the furniture industry. On the basis of information from 28 enterprises during 1981-1983 a multifactoral correlation-regression model was created for the indicator of expenditures per 1 ruble of commercial output. The model included 10 factor-indicators, including the material-intensiveness of the products, the capital availability for the labor of one worker, the electricity-intensiveness of the fixed production capital, the labor productivity of one industrial production worker and so forth. As a result, normatives were determined for changes in the production cost, depending on the incidence of each factor-indicator. According to these, at 15 enterprises the calculated values of the indicator of expenditures per 1 ruble of commercial output turned out to be lower than planned (in the range of from 1.2 to 2.6 kopecks). This indicates the existing reserves which, if they were taken into account promptly, would make it possible to establish more difficult plans for the given enterprises.

With the availability of computer centers in the absolute majority of associations and ministries, doing variant calculations presents no great difficulty, especially in places where the normative method of calculating and planning expenditures is used. For example, in the Sigma PO of the Ministry of Instrument Making, Automation Equipment and Control Systems the utilization of this indicator makes it possible to do planned calculations in the computer center of the head plant long before the beginning of the next planning period (more than 1.5 years) and to develop drafts of plans with respect to the basic indicators for the year and with a breakdown for the various months.

The problem mentioned here in forming substantiated plans with respect to the indicator of the production cost is typical of a whole number of branches of industry. Moreover, it is not the only one. In each branch (ministry) there are also specific problems having to do with improving the organization and the policy for planning the production cost. The shortcomings that exist here, in our opinion, are related largely to the lack of the necessary methodological provisions in the existing instruction documents which would regulate the process of drawing up and proving planning assignments at all levels of management. The development of such provisions could significantly influence the quality of planning calculations which today should be a matter of special concern in branches of industry.

Expansion of the independence of enterprises in the area of planning, including the indicator of the production cost of the products that are produced, does not mean weakening the unified methodological basis. On the contrary, the interests of the production collectives themselves require a

strengthening of the methodological foundations for the development of plans so as to evaluate the future correctly, to select the most economical directions for development, and to make effective management decisions that are directed toward streamlining production, revealing its internal reserves and reducing expenditures. This is also combined with national economic interests since the utilization of unified scientifically substantiated approaches to the formation and planning of such an indicator as production cost of products serves as a guarantee of the observance of financial discipline and successful functioning of the price mechanism while refraining from their application could prepare the soil for a lack of control, inefficiency and other negative phenomena.

Thus when the enterprises take advantage of their rights in the area of forming the production program and establishing the planned level of expenditures on its realization they should rely on a reliable, modern methodological base.

Now the basic documents for planning expenditures are: at the level of the ministries--"Methodological Instructions for the Development of State Plans for the Economic and Social Development of the USSR" in the section entitled "Production Cost and Profit" and supplements to it: at the level of the enterprises--instructions concerning the policy for planning, accounting and calculating the production cost of products. But the first of the aforementioned documents is general and fundamental in nature while the latter reflect the methodology for the formation of the given indicator. They do not pertain to concrete problems having to do with the policy and methods for developing the planning assignments for production cost themselves and they do not contain detailed recommendations for all levels of management for carrying out preplanning calculations or instructions for the organization of planning work (including information) or the determination of the responsible services and subdivisions and forms of planning documentation; they practically do not touch upon the policy and methods for disclosing, mobilizing and accounting in the plan for internal production reserves. Nor is this function fulfilled by documents which would seem to be intended especially for this purpose--the technical, industrial and financial plans of enterprises (PO's) and the instructions "On the Policy for the Establishment in Five-Year and Annual Plans for Industrial, Construction and Transportation Ministries, Associations, Enterprises and Organizations of Assignments for the Production Cost of Products (Jobs) and as Part of These Assignments the Limit (Maximum Level) of Material Expenditures or the Evaluation of the Fulfillment of These Assignments," which were approved by the USSR Gosplan, the USSR Central Statistical Administration and the USSR Ministry of Finance in 1982.

Yet methodological documents that contain instructions of this kind are needed in branches of industry. They have already been created or are being created in individual ministries. For example, the Ministry of Chemical Machine Building has approved the methodological instructions concerning the policy for drying up the draft of the annual plan for the economic and social development of the branch. The goal is to improve the quality of planning as a result of improving its organization and increasing the responsibility of functional administrations and divisions of the ministry for prompt and high-quality development of the plan. They regulate the work for drawing up the

draft of the annual plan and determine the parties responsible for sections, forms and indicators as well as the policy and time periods for developing and submitting these. Unfortunately, this document is intended only for the level of the ministry. In spite of this such experience deserves attention, and it could be useful in other branches of industry as well.

A number of branches have methodological documents which contain only individual methods for planning the indicator of production cost, for example, methods for conducting factor-by-factor calculations in the meat industry. The aforementioned methods take into account the specific features of the levels of management and the peculiarities of production in the branch. This has been reflected in the concretization and augmentation of the typical classification of factors. Thus for the level of the enterprises they have singled out 47 factors and subfactors. In addition to this, for the level of the associations they recommend a more consolidated method of determining the amounts of savings on a number of factors and the consolidated tabular form of calculation which makes it possible to establish the total for the association as a whole and to reflect the data for individual enterprises that are included in it. Doing these calculations according to this method makes it possible for the higher organizations to provide a better substantiation for the planning assignment for production cost that they have established for a concrete enterprise or production association and to conduct the necessary analytical research.

It should be noted that at the level of the enterprises as well certain branches have drawn up intraplant instructions which provide methodological guidance for planning work in production subdivisions (for example, the Uzhgorod Machine-Building Plant imeni 26 XXVI Syezda KPSS in the Kiyevpromarmatura PO). They are augmented by a summary of forms "Plan-Report" for the basic technical and economic indicators of the cost-accounting [khozraschet] subdivision. The instructions give detailed recommendations for filling out the forms and indicate the sources for obtaining the information and the time periods for submitting the documents to the corresponding services. Similar recommendations are contained in the temporary methodological instructions developed by the Sigma PO for applying under the conditions of the economic experiment the standard of the enterprise, "Development of Current Plans for the Production Cost of Products and Profit."

The practice of methodological work that has been described is worthy of encouragement but at the same time it needs support and further dissemination. Workers of the management staffs of ministries are frequently poorly informed about the achievements that exist in this area, which makes it impossible to adopt the useful undertakings and introduce progressive planning methods more rapidly. Individual articles that elucidate this experience periodically in the press are inadequate.

This places two issues on the agenda. The first—the development of the corresponding methodological points with a depth of concretization which can earmark the general policy for all industrial ministries for the development of plans for production cost, while allowing the latter to retain the right to augment them and reflect branch peculiarities. These recommendations should include everything positive that has been accumulated by practice. This will

provide flexibility in the management of planning developments and improve their quality. The second question is the creation of a coordination center which would contribute to an exchange of experience in methodological work in this sphere. If all the necessary information were provided this function could obviously be assigned to one of the central scientific research economics institutes (particularly under the USSR Gosplan).

At the present time the existence of even a couple of the aforementioned standard methodological documents does not compensate for the lack of concrete fundamental provisions in them concerning the organization and policy for planning the indicator of production cost which would provide direct guidance for action. These points should guarantee the necessary level of substantiation of the plans regardless of the degree of qualifications and experience of the developers and they should facilitate their task.

Frequently enterprises of one ministry or even of one association allow various deviations in planning work, particularly when determining expenditures on the output of products. These deviations are related to the utilization of different volumes and quality of initial information and various methods of substantiating the plan. These are not formal aspects but that which in the final analysis determines the level of the planned assignment, its feasibility and its difficulty. Therefore improvement of the practice of planning depends not only on research and development of new proposals in the area under consideration, but also on the observance of the policy that has already been adopted.

The efficiency and reliability of calculations of production cost depend largely on the existence in the enterprises of a system of norms and normatives for expenditures on each kind of product that is produced (taking into account the technology used in its production). They should encompass all kinds of expenditures of raw materials, processed materials, fuel, labor and financial resources, forming a bank of normative information so that with various variants of the production program and the plan for material and technical supply and with changes in technological processes there is a still a guarantee of the possibility of rapid and well-substantiated construction of a planning assignment with respect to production cost and other value indicators. Then it will be possible also to achieve the required level of coordination of physical and value indicators.

Unfortunately, the dissemination of the normative method of planning production cost is still limited to a small number of enterprises in the main machine-building ministries (in spite of the existence of hundreds and even thousands of individual norms and normatives at many industrial enterprises). the lack of an integrated system of norms and normatives for doing interconnected calculations, including for the indicator of the production cost, is frequently associated with the fact that the enterprises do not have properly arranged accounting, documentation or the necessary measurement instruments, sometimes even such simple things as weights and measures. But the main thing, in a number of cases, is the lack of interest on the part of the management staff at various levels in introducing this method, which reveals the true production capabilities of reducing expenditures.

The refusal to utilize the normative method is motivated mainly by the difficulty of establishing a certain part of the normatives. Sometimes this is actually the case. But frequently this argument is raised in places where they simply do not have the possibility of direct accounting when setting norms for resources (that is, through measurement, weighing, or counting in physical units). But various methods have long been known for determining normative indicators: statistical, calculation-analytic, expert evaluation, and so forth, which are frequently not used because of subjective factors.

It is hardly possible to overcome through administrative measures the inertia that exists regarding this issue in a number of branches. In our opinion, it is necessary to rearrange the existing policy for establishing plans for production costs and the system of incentives for fulfilling them in such a way that it would motivate the production collectives to accept assignments which would maximally take into account the internal reserves for reducing expenditures.

But there are also factors of an objective nature: the lack of development of methods for norm setting for complex items of expenditures that are included in the production cost of products, and also the traditional differences in the approaches to planning normative indicators and indicators of production outlays. The direction for improving other methods of calculating the indicator of production cost, particularly factor-by-factor planning, depend largely on overcoming these. A great deal of practical value could be produced by utilizing this in combination with the normative method which, in our opinion, should be reflected in the long-range calculations of the production cost of products on the basis of norms and normatives which would reflect the influence of various technical and economic factors.

Research conducted by the NIIPiN showed, on the one hand, that there is duplication in accounting for certain factors when planning norms and normatives and the indicator of the production cost and, on the other, there is divergence in the practice of the development and fulfillment of assignments regarding it. The plans for organizational and technical measures developed by planning divisions for ensuring the sum of savings envisioned by the established assignment for production cost in large measure do not correspond well to similar plans drawn up for the section "Norms and Normatives" by divisions of labor and wages, the head technologist and others. These shortcomings are apparently at the same time both the cause and the effect of the lack of coordination of the basic types of documents and instructions for planning the indicators under consideration which, in a number of cases, have been created "for the existing policy."<sup>2</sup>

When calculating indicators of the reduction of norms and normatives one uses not a stable grouping of factors as one does with planning the production cost, but makes a certain determination and selection of factors that have the most appreciable influence in the planned year on the proportional expenditure of resources. (Subsequently on this basis they form the plan of measures for reducing the norms and normatives.) To this end one usually constructs a regression model. The selection of factors included in the model is made on the basis of quantitative evaluations which are calculated utilizing the method of correlation analysis through a determination of the closeness of the

dependency of the proportional expenditure of resource on each factor and the level of their mutual influence. Factors which have a weak connection with the norm of expenditure (for example, with the coefficient of correlation at less than 0.3) are excluded from further consideration. Thus the "set" of factors taken into account in the calculations can change each year.

Moreover, when analyzing factors that determine the increase in the technical level of production one reveals whether they have reached their maximum value or not, that is, the amount after which a further increase is either technically impossible under the conditions of the given technology or economically inexpedient. The achievement of the maximum values for the most technical and economic factors should be taken into account in prognostication with the goal of determining the possibilities of a qualitative change in the development of the chject of prognostication.

This statement of the problem, in our opinion, is also correct for planning the indicator of production cost.

In order to eliminate the differences in the methods of factor planning of the indicator of production cost and the norms (normatives) of expenditures, one should apparently introduce the element of the dynamic nature into the branch groupings of factors that influence the level of the production cost of products while retaining basically the existing typical classification, and take these into account when planning the reduction of norms and normatives.

The "Standard Instructions for Applying the Normative Method of Accounting for Expenditures on Production and Calculating the Normative (Planned) and Actual Production Cost of Products (Work)," which were approved in 1983 by the USSR Ministry of Finance, the USSR Gosplan, the USSR State Committee for Prices and the USSR Central Statistical Administration, envision, for purposes of obtaining generalized data concerning factors in the changing of norms, the development of branch groupings of changes in norms which should be constructed directly in the cross-section of the basic groups of technical and economic factors that are applied when calculating assignments for reducing the production cost of products. At the same time in the corresponding divisions of the given document they give model groupings of factors in deviations from norms for expenditures of raw materials, processed materials and wages (replacement of raw and processed materials, change in the degree of extraction of basic and side products, additional expenditures (savings) on wages caused by this, and so forth) which do not correspond sufficiently to the indicated technical and economic factors.

Bringing the groupings of factors that influence the changes in the normative indicators and the production cost of products in line with those taken into account in planning should be considered to be the first step. It would seem that the second step should consist in the adoption of the next policy of planning. Initially factoral calculations are done for the norms and normatives of the expenditure of raw materials, processed materials, and wages, the results of which should be taken into account directly (and reflected in the corresponding form of documentation) when planning the production cost in the cross-section of the adequate kinds of expenditures. Then factoral planning is done of expenditures that are not normed at the

present time and are included in the production cost of products (they should include primarily indirect expenditures and, apparently, a certain part of the direct expenditures). The application of this planning policy will make it possible, with a refinement of the functions of the corresponding services and individual workers, to eliminate duplication in the calculation of the savings that are received and, when developing the plan for organizational and technical measures, to make the latter comprehensive in nature.

At the same time it is necessary to do work for improving the factoral planning of the production cost in other areas as well. In particular, it is necessary to finish the development of methods for calculating the influence of concrete factors on it and checking on their reliability, taking into account the following circumstances. Now individual enterprises, while leaving the reserve of savings on a number of measures unaccounted for, obtain the possibility of covering the sums of savings that are not obtained from some factors through others. There is no doubt that the enterprises should have a certain possibility of maneuvering, but they frequently "undercollect" the planned savings as a result of such important factors from the national economic standpoint as raising the technical level of production and so forth. It makes no difference to the society which kinds of expenditures of resources and economic factors are responsible for reducing production outlays. This process eloquently demonstrates the intensification (or, conversely, the extensive direction of development) of production and the nature of scientific and technical progress that is taking place. Therefore it is necessary to improve the system of accounting and reporting on the influence of the basic technical and economic factors. It would also be expedient to investigate the possibility, using the system of material incentives, of exerting influence on the fulfillment of the planned projects for reducing the production cost as a result of the influence of the basic (major for a concrete segment of time) factors.

There should be further regulation of the existing list of factors and correspondingly the measures conducted "under them" was to avoid the repeated accounting for the economy of material and labor expenditures. Repeated accounting is found with respect to a number of factors: for example, the savings on conventional permanent expenditures are taken into account once under the factor "Improvement of Organization of Production and Labor" in the part related to the reduction of expenditures on management and a second time in the factor "Change in the Volume and Structure of the Products." On the scale of the VPO and the ministry the consolidation of the data calculated with the imprecisions noted here can lead to serious distortions in the planning calculations.

It is necessary to eliminate the existing unjustified divergences in the titles and the composition of the typical and branch groupings of factors. At the same time frequently the branches do not investigate the specific factors that are conditioned by the peculiarities of their production, which lowers the level of substantiation of the plan. At the present time it makes special economic sense, in our opinion, to single out the following factors: the increased and reduced costs that depend and do not depend on the efforts of the production collectives themselves.

The influence of factors whose effect does not depend on the efforts of the collectives of the plant (PO), that is, which are controlled at a higher level of management are not taken into account so far. One of these factors is the redistribution of the production program between the enterprises and the PO's that are included in the specific VPO or ministry. The level of the production cost of products of the branch (subbranch) as a whole depend significantly on this. But the mechanism for accounting for this influence is not sufficiently developed. Streamlining the distribution of the production program can and should become a permanent measure for influencing the management staff of the VPO and the ministry to reduce production expenditures.

Here, apparently, it would be appropriate to touch on the question of the peculiarities of planning the production cost at the middle and higher level Now the plan for the production cost of products at of management. enterprises, in terms of its content and the composition of indicators, coincides with the plans of the VPO's and the ministries. Certain differences are not of a qualitative nature and can be reduced merely to a difference in the quantity of such documents as planning calculations which at the level of enterprises are drawn up either for all or for many kinds of products, and at the level of industrial associations only for certain of the main kinds of products. Individual planning documents for indicators of expenditures at enterprises and PO's can be distinguished by greater detailization emphasis. This is required by the specific nature of production or the management of the plant considers this expedient. These differences, in our opinion, are unessential. Obviously, this is not altogether correct since the VPO's and the ministries operate not simply by totaled or average (average weighted) amount, but by qualitatively different categories -- the indicators of the production cost of the subbranch and branch.

Apparently, during the course of the development and approval of the plan the VPO's and the ministries should first of all concentrate attention on those questions of reducing production expenditures which are within the realm of Here it is necessary to refrain from unjustified their competence. duplication work of the management staff at all levels (for example, in the reverification by ministry staff workers of the substantiation of drafts of plans of enterprises, PO's and organizations that are included in one industrial association or another, and so forth) and also from checking too closely on the enterprises. It is necessary to consistently introduce effective measures for control of expenditures on production. For these purposes there would be some point in clearly delimiting the functions and responsibility of various divisions (administrations) and individual workers for the development of plans for the production cost and control over its implementation and to record this in the official instructions, standards or branch documents concerning planning.

Additionally, it is necessary to improve and develop new scientifically substantiated methods of planning the average branch indicators of production cost (particularly utilizing the interbranch balance of production and distribution of industrial products), and to utilize more extensively indicators that characterize more precisely the level of technical progress in the branch and the effectiveness and quality of its work (such as the

production cost of a unit of some quantitative parameter, the production cost of a life cycle of items, and so forth).

This article has not touched on all the problems associated with improvement of the planning of the production cost of products. It seems that the abundance of these forces us to address ourselves to the preparation of a new edition of the existing methodological documents that contain instructions on the policy for establishing in the five-year and annual plans of enterprises, associations and ministries assignments for the indicator of the production cost so that they will reflect modern tendencies regarding the expansion of the rights of enterprises in the area of planning and would make it possible to formulate truly scientifically substantiated assignments concerning the indicator of the production cost without leaving any room for miscalculations which open up the path to inefficient utilization of production resources.

#### **FOOTNOTES**

- They were made by the Lvov Division of the Institute of Economics of the UkrSSR Institute of Economics during the course of joint research with the NIIPiN under the USSR Gosplan.
- 2. The decree of the USSR Gosplan, "The System of Progressive Technical and Economic Norms and Normatives," adopted in 1980 should contribute to eliminating these divergences. For the first time it introduced the basic group of factors which should be taken into account when calculating or refining norms and normatives. They corresponded basically although not completely to the grouping used in the planning of the indicator of the production cost. But these points of the decree have not yet been embodied in practice.
- 3. See, for example: "Methodological Recommendations for Forming Indicators of the Proportional Expenditure and Savings on Raw Materials, Processed Materials, Fuel and Thermal and Electric Energy Over the Long-Range Future," part I--"Industry". Moscow, NIIPiN, 1980.
- 4. The USSR Central Statistical Administration has developed Form No 1-S (Factors), but so far it is not being used in practice because of the lack of data for filling it out.

COPYRIGHT: Izdatelstvo "Ekonomika", "Planovoye khozyaystvo", 1986.

11772

CSO: 1820/138

#### INDUSTRIAL DEVELOPMENT AND PERFORMANCE

POOR CAPITAL PRODUCTIVITY REVEALED, EXTRA SHIFTS PROPOSED

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 3 Jul 86 pp 1-2

[Article by A. Fateyev, secretary of the Leningrad Oblast party committee: "The Goal is to Accelerate the Reequipment"]

[Text] Today, each of us is obligated to think deeply about how to make the most skillful and effective use of what we have. This question has arisen also for the party and soviet organs of Leningrad and the oblast. When we defined ways to accomplish the tasks set at the 27th party congress and plans for the 12th Five-Year Plan, we relied on an analysis of the results of the work performed over the past 2 years. It showed that realization of the Intensification-90 territorial-branch program had resulted in average annual rates of growth of 1.3-fold in the region and 1.5-fold in Leningrad. The share of products in the highest quality category had increased markedly at the same time, material outlays for the production of commercial products fell, and the number of workers engaged in manual labor was reduced.

The clearly unsatisfactory situation with respect to the use of fixed capital stood out against the background of these results: its growth rates were outstripping rates of growth for labor productivity. This conclusion could not fail to produce alarm. Many of our enterprises have begun a process of modernization and technical reequipment in recent years, flexible production systems, rob tized complexes and sections, and multiple-operation machine tools with ChPU [numerically programmed control?] have appeared in the shops. One asks: Why have these steps not produced the desired effect?

A study of the situation revealed serious flaws in the implementation of the technical reequipment. According to data from the enterprises, almost 70 percent of the funds allocated for it are used to replace worn-out equipment with similar, new equipment. This kind of replacement clearly does not contribute to a growth of labor productivity, to an increase in output or to a reduction in production outlays, but only maintains production at the former level. This process actually has nothing in common with real technical reequipment, but only creates the appearance.

Nor has the advanced equipment arriving in the shops brought any perceptible changes for the better. It is as though this equipment has disappeared in the mass of old and outmoded equipment. Accumulating from one year to the

next, it has become an economic burden to the enterprises. Around 600 million rubles was spent on repairs and tens of thousands of workers were used to maintain this equipment in operating condition during the past 5-year period, for example.

The main problem is that a significant part of the workers are used for operating the obsolete equipment, which accounts for approximately one-third of the fixed capital. In great part because of it, a situation has developed in which the number of work stations in the region exceeds the number of workers by almost 25 percent. All of this has predetermined a low level of output for the advanced, highly productive equipment: at many enterprises it is used for only five or six of the 21 shifts comprising a week. There is no one to service it.

Unfortunately, this negative trend has threatened only to intensify. A study of draft management plans of the enterprises for the current 5-year plan has shown that most of the ministries are retaining their "loyalty" to the extensive methods. Around 40 percent of the capital investments specified in these plans have been designated for new construction and the expansion of existing capacities.

In reality this has meant that most of the equipment allocated will go to outfit new buildings, and possibilities for the technical reequipment of existing production operations will be reduced to a minimum. The discrepancy between the number of work stations and the number of workers will become even greater. An attempt to reduce it by attracting workers from other regions will make it more difficult to resolve already difficult social problems. Futhermore, the excessive amounts of new industrial construction, which draw off not just funds, but also the capacities of construction organizations, threaten to affect rates of construction of housing, cultural and personal-service facilities.

The search for other, more efficient ways to accomplish the assigned tasks has led to the development of proposals by the Leningrad Oblast party committee, which have been approved by the Politburo of the CPSU Central Committee. As pointed out at the last, June 1968 Plenum of the CPSU Central Committee, they essentially consist in making rapid technical reequipment the basis for increasing the volume and quality of output. In order to accomplish this, it has been proposed that obsolete fixed capital be taken out of use and that the freed areas be used for setting up modern production operations. It has been decided to meet targets for the 5-year period by loading the modern equipment more fully and switching it to two- or three-shift operation.

The fact should be stressed that raising the machine-shift coefficient is not an end in itself, but only a means. Having selected rapid technical requipment as the means of intensification, it was necessary, figuratively speaking, to find a prop for it: production areas to house the modern equipment. They are what would make it possible to change to a two- or three-shift operation.

I shall not hide the fact that many doubts and objections were expressed during the process of working out these proposals. Many plant directors and specialists stated in all seriousness that no sort of benefits or additional money would force people to work the second or third shift. Experience has proved the opposite, however. When this became a production necessity, entire collectives went over to two- or three-shift work schedules without waiting for prompting or an order "from above." And the workers themselves frequently initiated the transition.

This was true in the case of V. Berezin's team at the Izhorskiy Zavod, for example, P. Ivanov and B. Lazarev's teams at Elektrosila, and of many other machine-tool operators servicing the unique equipment. Having assumed responsibility for its efficient use, they relinquish shifts to one another without a halt, without stopping the machine tools, and even eat according to a sliding schedule.

Naturally, these examples raise no doubt as to the need for additional moral and material incentives for the people working on the evening or night shifts. They must also be provided with all of the conditions necessary for a normal life, rest and relaxation.

Without such steps it is difficult to avoid the negative developments which we must foresee. Specifically, the conversion to a multiple-shift schedule could evoke a surge of personnel turnover and attempts by individuals to transfer to teams with the traditional work schedule. The main "staging area" for such "maneuvers" will be shut off, to be sure: experimental production institutes and design offices will convert to a multi-shift schedule along with the industrial enterprises. However, none of this relieves us of the need to initiate extensive explanatory work in the labor collectives and to develop in the people a clear understanding of the need for and the importance of the planned reforms.

Questions having to do with production and technology cause considerable anxiety and sometimes raise doubts in the enterprise directors and specialists. They free only "patches" of production area by removing three to five machine tools from each shop. In order to turn these "patches" into spacious areas suitable for housing a rob tized line or a flexible system, it will be necessary to transfer some of the equipment from one shop to another, to redistribute the jobs among them and to set up the production lines anew.

This is complex and labor-consuming work. One has to adjust to it, however. The process of complete technical reequipment will require many years even at the rates of fixed capital renewal which we have planned (on the order of 12 percent a year, which is practically double the usual rate). In other words, if one looks at things realistically, it will essentially be a continuous process. This raises the question of enhancing the equipment's mobility with new technical answers.

Some of these answers are already known. Specifically, vibration-damping devices making it possible to make the foundations far lighter were used

in the installation of the "5000" mill at the Izhorskiy Zavod association and in the installation of equipment at a number of other enterprises. The installation of equipment without foundations, using mountings, should be the next step in this direction. They promise to significantly reduce outlays for maneuvering the equipment during changes in the production process.

It is planned to complete the transition to the multiple-shift schedule as rapidly as possible. It will create the conditions necessary for the simultaneous removal of obsolete equipment from use. And after that, for achieving the main objective: accelerated technical reequipment with advanced equipment.

Selection of the directions for the technical reequipment is an important task. How correct and precise it is will determine outlays for the establishment of new capacities and the amount of savings to be used for expanding housing construction and resolving social problems. In this matter we are counting not only on the experience and boldness of plans of the enterprise specialists, but also upon the active participation of science, which has been assigned a leading role in the Intensification-90 program.

The planned reforms also have "hidden" objectives. The orientation toward maximum loading of the equipment and increasing the return from fixed capital is to be a perceptible blow against "subsistence management" and to motivate enterprises to get down to matters of production specialization and cooperation, including those which go against departmental barriers. The conversion of Leningrad's largest associations to self-financing, to terms of complete economic self-sufficiency, could be a large stimulus to this. These have demonstrated their effectiveness at the Sumy Machine-Building Association imeni M.V. Frunze and at AvtoVAZ [Volga Motor Vehicle Plant?].

The high rating given to the Leningraders' initiative in M.S. Gorbachev's report at the July 1986 Plenum of the CPSU Central Committee and the approval and support given by the Politburo of the CPSU Central Committee give us confidence that the vast program of reforms we have outlined will be fulfilled. While counting on active assistance from ministries and departments, we are aware that success will depend primarily upon us, upon persistent and systematic work by all party organizations, soviet and management agencies, upon the initiative and creative activeness of the workers, specialists and scientists.

11499

CSO: 1820/166

#### RESOURCE UTILIZATION AND SUPPLY

#### ECONOMIST EXAMINES NEW WHOLESALE TRADE PROCEDURES

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 4 Jul 86 p 2

[Article by V. Belkin, doctor of economic sciences, and P. Medvedev and I. Nit, assistant professors, School of Economics, MGU [Moscow State University], Moscow: "Wholesale Trade: Position of Partners"]

[Text] However varied the opinions may be about how one should conduct the radical reform of economic administration, there is probably one thing that all the economists have come to an agreement about: the largest number of problems have accumulated in the circulation sphere. It is precisely the current system of material-technical supply that has become a deterrent to the carrying out of reforms in the economy. This topic is discussed by the authors of the following article.

Actually, the sense of the reorganization that has begun is complete cost accountability for the enterprises. The collective is required to earn money for all its needs, including the expansion and re-requipping of production. Let us assume that an enterprise has earned that money. What does it do now? Where is it supposed to use that money? There are no machines, raw materials, or construction materials offered freely for sale. It is necessary to wait until someone allocates the funds. Maybe he will allocate them, and maybe he won't. Money, even if it has been earned, is nothing if the only way you can "barter" with it is by authorization. What kind of cost accountability is this, what kind of self-financing?

Much has been said about the supplier being the boss: he's the one, people say, who forces on the consumer commodities that are of low quality or that are completely unneeded. Actually, there is no need to force anything on the consumer: he has been assigned to the supplier, and he has no choice in the matter. The manufacturer is guaranteed the sale of practically any kind of output. What reason does he have to indulge his partner?

Under the present-day conditions the increase in production is conceivable primarily by means of an economizing of objects of labor. And yet supply based on funds inevitably leads to the squandering of resources and simultaneously reproduces the shortages of output. Economists have already explained the nature of this paradox many times. The results are also well

known: during the past five-year plan the reserves of commodity-material assets grew at a rate that was 1.5 times faster than the volumes of production. During individual years the increase in the national income did not compensate for the increase in reserves. Putting it another way, production operated not for consumption, but for the warehouses where the output slowly dies and gets older, or simply becomes unusable. We consider this fact to be the most objective evaluation of the existing supply system.

In a word, from whatever angle you look at the situation, the reorganization rests upon the circulation sphere. The reform of that sphere is the only link that one can use to stretch out the entire chain of economic problems that have accumulated. The party's 27th Congress pointed out how that sphere should be reformed -- it is necessary to develop wholesale trade in producer goods. The sense of this measure is the changeover from the centralized distribution of output intended for technical-production purposes to its sale on the basis of coordination between the partners.

One might say that no one today will dispute the necessity for this radical measure. But how, practically speaking, should it be implemented? It is there that the opinions are divided.

Some people think that it is necessary immediately and decisively to introduce wholesale trade throughout the national economy. Individual zones of wholesale trade cannot coexist with the existing system of fund allocation. They will inevitably be stifled by it.

That is a rather solid argument. Nevertheless it is difficult to imagine that such a fundamental innovation could be introduced immediately, in a single day for everyone. In life in general, it is necessary to begin somewhere, to begin without any delay, and then, in a steady and planned manner, to ascertain the undesirable consequences of the reorganization, to eliminate them, and thus to develop the optimal forms of wholesale trade.

But, then, where does one begin? In principle three paths are conceivable. The first is to put into free sale those commodities intended for production purposes which are no longer scarce. As commodities become available in sufficient quantities, their list will be expanded. USSR Gossnab already made the attempt once to carry out this idea, but nothing came of it: it was hampered by the system of fund allocation, which automatically herds the resources into the production of unnecessary articles that die slowly in the reserves.

The second path is to begin with an individual, rather large region. This too, we assume, will not be successful, inasmuch as the commodity flows are not confined to the region.

Finally, the recommendation is made to change over to wholesale trade, at first, only one branch or a few branches. Starting new year this idea will be tested in Minstroydormash [Ministry of Construction, Road, and Municipal Machine Building], and in a number of nonproduction branches. This alternative is better, but, in our opinion, the choice of the ministry for the experiment is not completely fortuitous.

With the transition to wholesale trade, Minstroydormash will be completely unlimited in purchasing producer goods, other than money, which will come from the customers. But will the purchasers who are operating according to the old rules treasure their rubles, with which, unlike Minstroydormash, they will still be unable to buy anything? Probably not.

Minstroydormash's partners, on the other hand, for the same reason will not receive any incentives to execute the work orders for that branch by deadline and with a high level of quality. Finally, one must expect that, with the changeover to wholesale trade, there will be a rise in wages -- at least as a result of the reduction of the reserves and losses. But what will that rise be supported by? By real increases in the production of output? This is not completely true. Because, after all, the output of Minstroydormash basically goes not into retail sale, and it is possible that there may prove to be no commodities available for the workers at its enterprises to buy with the additional rubles of their earnings.

It is another matter with the enterprises producing output in Group B, that is, consumer goods. The customer is the objective judge who evaluates the results of the work by means of the ruble, and that ruble is one that can be spent for any purpose he desires. It would seem that it would be most convenient to begin the changeover to wholesale trade here. Profitable enterprises that produce popular consumer goods can be changed over to the new rules immediately.

True, for the time being, the work of those enterprises is evaluated not by those rubles that the public has paid. The output is considered to be sold after scarcely arriving at the wholesale base. This procedure must be discontinued: the supplier must have real funds at his disposal -- after the sale of the commodities in the stores.

Understandably, the commodity must speak for itself. Nevertheless, at first, in order to provide insurance for retail trade, it would be a good idea to encourage the sale of commodities that are arriving from the reformed enterprises. A certain share of the income remaining there could be transferred to the store collective for expenses at its own discretion — for wages, for the paying of bonuses. Similarly, those who change over to wholesale trade could give additional payment for effective cooperation to the suppliers of raw and other materials and equipment and to the construction workers. For ordinary shipments and services, it could be the usual price plus a modest fixed markup. If the production order is nonstandard or if it is late in being included in the supplier's plan, the payment can be agreed upon.

But what if, in the race for "live" money, the suppliers begin to execute the production orders to the detriment of the other consumers? This danger exists, but it can easily be forestalled if it is authorized to use the funds from the special accounts only if there has been fulfillment of the planned deliveries for the quarter, half-year, or year.

It is easy to note that the pioneers in wholesale trade will prove to be under somewhat unfavorable conditions: they will pay their suppliers at slightly higher prices, and will also give an additional rebate to the stores. Well, then, they will have to work better. We believe in the beneficial influence of this radical innovation: reserves can always be found when initiative is unleashed. The benefits to the people in related branches, which are offered by the enterprises in Group B, will serve, as it were, like life-giving pulses, and will encourage the other branches also to prepare for the work in the new way. Then it will be necessary to issue not prescriptions concerning the transition to wholesale trade, but authorizations to those who are ready to do so.

5075

CSO: 1820/165

#### REGIONAL DEVELOPMENT

#### EXPERTS REASSESS INDUSTRIAL POTENTIAL OF URAL REGION

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 4, Apr 86 pp 25-31

[Article by M. Sergeyev, director of the Economics Institute of the USSR Academy of Sciences' Ural Scientific Center, and N. Talalayev, USSR Gosplan representative for the Ural Economic Region, under the rubric "The Decisions of the 27th CPSU Congress Put into Practice": "The Industrial Potential of the Ural Region and Its Use"; boldface source introduction given in all caps]

[Text] THE RENEWAL OF THE FIXED CAPITAL OF THE URAL REGION'S INDUSTRY, THE MODERNIZATION AND REEQUIPPING OF ITS ENTER-PRISES, THE CHANGE IN INVESTMENT POLICIES, THE RATIONAL USE OF RAW MATERIAL, FUEL, POWER AND LABOR RESOURCES AND THE OVERALL APPROACH TO THE EXTRACTION OF RAW MATERIALS ARE PROBLEMS TO WHICH THIS ARTICLE IS DEVOTED.

The transition of the nation's economic structure onto the intensive path of development and the rapid improvement in strategically important directions can be successfully implemented through a more complete accounting of the present-day condition of the economy in the regions and through a proper evaluation of their resources. In the CPSU Program (New Edition) emphasis has been placed on the importance of the overall and highly efficient development of each region of the nation. The Ural Economic Region [UER] is a leading industrial region. Made up of two autonomous republics and five oblasts, it represents a most important integral part of the national economy's complex. This region has one of the nation's highest levels of territorial concentration of industrial production.

Just as in both the All-Union and the international socialist division of labor systems. the UER specializes in the production of heavy industry items, while at the same time remaining a producer of agricultural products, including commodity grain. Here the fuel and power complex, the transportation, communications, construction and construction materials industries have achieved a high level of development.

A typical feature of the UER is the large-scale production of production resources. In the region significant quantities of metallurgical, chemical, drilling, forging and pressing equipment, as well as products for power, electrical engineering, transportation, agriculture, construction and machine

building, etc., are produced. A large portion of the finished products are manufactured from the bounty of the UER's natural resources and raw materials produced in the terraitory. Items produced here include: cast iron, steel, rolled steel, steel pipes, non-ferrous metals, asbestos, mineral fertilizer and a variety of products of the chemical, petrochemical, lumber, woodworking, paper and pulp industries and of other branches of industry.

Located at the junction of the European Zone and the nation's eastern regions, the UER plays a connecting and ever-increasing role in the interregional economic ties. Based on the volume of producible national income (net production), this region occupies one of the leading places among the nation's economic regions. However, in recent times, the efficiency of public production here has decreased. The growth rate of the national income in the USSR's industry for the recent decades has slowed down and in the UER to a greater degree.

On the basis of the analysis of the state of the economy for the preplanned period and the examination of the problems from the point of view of Union-wide expediency, problems common to the UER have been substantiated and picked out, the timely solution of which will help increase the contribution of the UER's industry to the nation's combined public production and national income. A determination has been made of the most important paths for increasing the efficiency of the leading industrial sectors--ferrous and non-ferrous metallurgy, the machine building and chemical industries, as well as the fuel and power complex.

One of the most important problems is the acceleration of the renewal of the industrial system. An analysis conducted by the Economics Institute of the USSR Academy of Sciences' Ural Scientific Center of the regeneration ratios in accordance with the UER's leading industrial branches has indicated that the renewal of the fixed production assets is proceeding here at a slower pace than the national average. During the standard period of service for metallurgical equipment (25 years) in the blast-furnace industry 93 percent of the assets have become outdated, and in the rolled steel industry-85 percent. The open-hearth furnaces should give way to the oxygen converter method for electric smelting of steel. Together with the sector's largest combines (Magnitogorsk, Nizhniy Tagil, Chelyabinsk and Orsk-Khalilovo) in the UER, the old metallurgical plants with an annual production volume of 200,000-400,000 tons have been maintained and continue to operate. Their share of the UER's production of ferrous metals is 8-10 percent and their share of the number of industrial production personnel is 22 percent.

In the region's metallurgical enterprises, for all practical purposes, there is a lack of modern continuous-casting machines (CCM), even though this is precisely a large part of their production output. The shortcomings in means for the finishing and thermal hardening of rolled steel, in equipment for vacuum treatment outside the furnace, and in modern mills for hot and cold rolled steel are being felt. The growth rate in the output of oxygen converter steel and especially electric furnace steel is clearly inadequate.

production. The inadequately intensive development of the territorial construction organizations is frequently associated with a lack of stability in the industrial construction collectives. In several construction organizations the number of workers is being reduced. This has become the trend. The reduction is explained by the poor working conditions, the poor organization of production and the inadequate concern for the social and living conditions of the workers. In the UER life is also pushing forward other demands associated with the reorganization of the investment process. In our opinion it is necessary to make more rational use of the entire employable population in socially useful labor by means of the economically expedient redistribution of the labor force among the enterprises through a job placement bureau in large industrial centers and through the formation of labor resources balance accounts in the oblasts' planning organs, which will make it possible to make more sound use of public working time. Even K. Marx, in exposing the essence of the economic law of saving time, emphasized; "the saving of time, equally with the planned distribution of working time in the various sectors of industry, remains the first economic law in terms of collective production. This becomes the law to a much greater degree." (Footnote 4) (K. Marx and F. Engels, [The Works of..], Vol 46, Part I, p 117)

During the erection of housing and other social and domestic projects, as well as of small industrial enterprises, renovation with a small amount of construction and installation work, and the modernization and replacement of outdated equipment it is advisable that the construction be done using the forces of the industrial enterprises (associations) themselves, without employing contract organizations. Several production collectives are carrying out construction work using their own resources in significant amounts (3-5 million rubles), but many are not using this mode of operation at all. There are frequent examples when the output during the use of an organization's own resources for construction and installation work is higher than in specialized construction organizations. Such a result is understandable. The use of an organization's own resources makes it possible to make fuller use of the enterprise's labor resources. And the use of the enterprise's materials handling and power equipment will lead to a decrease in cost and to acceleration of the work.

The provision of material and equipment resources (with the exception of brand-name and imported equipment) for the work carried out with this method through the territorial organs of the USSR Gossnab in accordance with requisitions from the enterprises (associations) will promote the further development of the use of an organization's own resources for construction work. Calculations show that the volume of work being carried out using an organization's own resources needs to be increased significantly even in the 12th 5-year Plan. The carrying out of modernization and technical reoutfitting of enterprises is also a redistribution of working time among the sectors but in a different form. This type of redistribution is economically sound.

It seems to us that in order to increase the effectiveness of the industrial development of the UER, of the incorporation of the new approach towards the use of material, financial and labor resources and of the organic combining of sectorial and territorial planning it is advisable to develop 5-year and yearly plans for the complete economic and social development of the UER as an integ-

The modernization and renovation of fixed assets is proceeding slowly in the coke by-product, refractory materials, sintering and maintenance industries. There is a similar situation also in the non-ferrous metallurgy, as well as in a number of machine building enterprises, where there is also a large share of physically and mentally outdated equipment.

For the purposes of intensification of the UER's leading industrial branches in the 12th 5-year Plan it is necessary to accelerate the renewal of their fixed assets. In ferrous metallurgy, for example, they are facing large-scale measures in two directions: first, a significant increase in the relative amount of advanced base methods and equipment, keeping in mind the cardinal improvement of the steel production structure with the simultaneous phase-out of outdated blast and open-hearth furnaces, and second, the modernization of old UER plants, setting up on their foundation modern enterprises with specialization in the production of advanced types of products for metallurgy and machine building. They are facing the modernization of the first phase of steel production of the Magnitogorsk Metallurgical Combine through the introduction of the first phase of an oxygen converter foundry composed of two 350-ton converters, four slab-type CCM's and equipment for vacuum treatment of the steel. At the Chelyabinsk Metallurgical Combine it is necessary to place into operation the first phase of an electric steel foundry. It is necessary to modernize to greater capacity the electric steel and oxygen converter foundries. At the Orsk-Khalilovo Combine it is necessary to build an electric furnace in the complex with CCM's and a line for finishing the steel outside the furnace. Here it is expedient to organize the production of metallized pellets. It is necessary to shift the casting of steel to CCM's and to develop electric steel production as well at several enterprises of the Uralchermet [Ural Ferrous Metallurgy] Association.

The development of the Nizhniy Tagil Metallurgical Combine, including oxygen converter production, must necessarily be tied to the modernization of the Kachkanar GOK and in the future with the construction of the Kachkanar GOK No 2 and the satisfaction of the requirement for vanadium-bearing output.

The USSR Ministry of Ferrous Metallurgy should consider and adopt definitive modifications for the modernization of all the old enterprises of the Uralchermet Association. In our opinion it is advisable to implement the specialization of a number of metallurgical enterprises: the Alapayevsk Metallurgical Plant in the production of structural rolled steel for the needs of the machine building industry, the Staroutkinsk plant in the production of iron and alloy powders, the Nizhniye Sergi plant in the production of machine building blanks, the Asha plant in the production of very fine bands of transformer, monocrystal and amorphous steels, The Lysva plant in the production of cold-rolled steel for the purpose of providing plating for the foundry itself, the Metallurgical Combine imeni Serov in the production of eletrical steel from CCM's, the (Salda) plant in the production of rail braces, the Chusovoy plant in the production of vanadium-bearing products and the Revda Metalware Metallurgical Plant in the production of alloyed welding wire. The suggestion concerning the organization of the casting of tubings for the subways at the Satka plant deserves attention.

In the Central Committee's Political Report to the 27th CPSU Congress it was noted: "Much remains to be done in the metallurgical and chemical industries and in reequiping them with more productive equipment." (Footnote 1) (PRAVDA, 1986, 26 Feb) This applies completely to the UER's enterprises.

The UER is the nation's largest mining base. It is rich in mineral resources, which are not renewable. For this reason the national economy's interests require the strengthening of the conservation and the rational use of raw material, fuel and power resources and other resources, the extending of the reprocessing of metallic ores and other minerals, of which a quarter of a billion tons are mined every year, but only a third of which is used profitably. At present still being thrown out in the tailings are titanium, copper, sulfur, chromium and platinoids contained in iron ores, and the percentage of vanadium extracted is still low. Mining and enrichment tailings are, to a significant degree, a considerable source of raw materials. Thus, the blast furnace and steel smelting slag of the Nizhniy Tagil Metallurgical Combine contains significantly more zinc than rich zinc-bearing ores. Sulfide ores from the Magnetic Mountain [Magnitogorsk] have been used up without extraction of their copper. The waste from the enrichment of sulfide ores from Vysokogorsk contain copper and cobalt that are being lost.

The thorough combination of the rational use of natural raw materials, their reprocessing and measures for the conservation of natural resources is the most important direction in the development of the region's economics in the next few years and in the long term. Here and now significant reserves of raw materials for the production of pig iron, steel, rolled steel, copper, aluminum, nickel and other metals are concentrated. But in recent years the raw materials base of the region has changed noticeably. The reserves of rich ores close to the surface are being exhausted. The industry is shifting to the exploitation of regions where the ores have a smaller content of the basic components and where the mining and geological conditions are more complicated.

The constant growth in the smelting of ferrous and non-ferrous metals in conjunction with the change in the qualitative and quantitative characteristics of the raw ore has made it necessary to ship ores from remote regions of the nation to the UER, which has resulted in an increase in expenditures and a reduction in the efficiency of the operations of the metallurgical complex. For the long term it has been proposed that there be an increase in the output of raw materials not only by using new deposits, but also by using more completely the exposed rocks, by expanding the complete reprocessing of raw materials and industrial wastes, as well as by increating the output of subsurface raw materials. There will be an increase in the volume of work of an environmental protection nature.

Special significance will be attached to the use of complex deposits as sources for obtaining a whole gamut of useful components (copper, zinc, sulfur, iron and others). The complex nature of the raw materials is becoming predominant not only in non-ferrous metallurgy, but in ferrous metallurgy as well. Thus, if in the balance reserves of the UER's traditional magnetites the value of iron amounts to 93 percent and the accompanying components only 7 percent, then in the reserves of titanomagnetites—a prospective raw material for the UER's

metallurgical industry--iron makes up about 40 percent of the overall value and other metals--vanadium, titanium, platinoids and scandium--make up nearly 60 percent. In the chrome-nickel brown iron ores the portion of chrome and nickel (according to value) amounts to nearly 50 percent. Among the group of more efficient iron ores are the magnetites from the Tagilo-Kushvinskiy, Severo-Peschanskiy, Sokolovsko-Sarbayskiy and Kurzhunkulskiy deposits, the titanomagnetites of the Kachkanar group of deposits and the (bakalskiye) brown iron ores and siderites.

The calculated balance and the corresponding economic evaluation of the ores can be used during the development of a long-term plan for the development of the UER's iron ore industry.

In the UER a group of large production combines has been formed. Their principal special feature is the more complete reprocessing of raw materials and the production, along with the basic shapable products, of many other types of end products and semifinished products. Thus, enterprises involved in the extraction and reprocessing of copper ore raw materials (the Krasnouralsk combine, the Sredneuralsk mill and others) have been converted into complexes with a range of products of the metallurgical and chemical branches for the production of mineral fertilizers. But not all the prerequisites for converting the enterprises which extract and reprocess the primary raw material into multi-sectional combines have been realized. This applies to the unique Verkhne-Kamskiy deposit. Here it is possible to establish a large combine for the production not only of potassium fertilizer, but also of various types of sodium and chlorine using electrolysis of sodium chloride. a large portion of which is (currently) being sent to dumps and sharply worsening the condition of the environment. It would be beneficial for matters to draw off from the natural gas being piped across the UER the ethane fraction that is currently being burned off. On this basis it would be expedient to organize the production of ethylene, polyethylene and polypropylene. In our opinion it is necessary to support the proposals of the local organs regarding the start-up of construction, at least by the end of the current 5-year plan, of a gas and chemical complex which would be operational in the subsequent 5-year plans.

An important direction in the improvement of the complete use of raw materials and material and power resources should be more close-knit interindustrial and intersectorial cooperation. It is expedient to combine the complex output of the various departments into a single technological chain. The intersectorial mining industry complexes could become the structure which would make possible the overcoming of departmental interruption in the solution of the problems in the complete use of mineral resources. The unique multi-component make-up of the UER's ores establishes the importance of solving this problem for the the UER.

The experimental mining industry complex can be established in the northern section of the UER. Here, in a compact region, in close proximity to one another, there are situated ore sites for non-ferrous metals, iron ores and construction materials. However, exploitation of these resources is expedient only when conditions exist for joint processing and, consequently, one-time financing for the construction of mining enterprises with the establishment of a common infrastructure, making it possible to obtain significant savings in capital expenditures.

In talking about the conditions for the intensification of industry it is necessary to dwell particularly on the questions regarding raising the quality and reliability of the national economy's power supply for the UER. The planned tasks of the 11th 5-year Plan for the production of electric power by the UER's power systems have been fulfilled. New power capacities have been put in, intersystem and system-forming 500 kV power transmission lines have been built and activated and new transformer capacities have been put in. At the Beloyarsk AES a new power unit with a pilot nuclear reactor of the BN-600 high-speed neutron series has been installed, construction has been started on two new AES's and expansion of the Beloyarsk AES has begun. Construction is being completed on the UER's first 1150 kV, extra-high voltage power transmission line between Kustanay and Chelyabinsk and on a pilot, special-design coal dust boiler unit at the Perm GRES. However, the increase in the electricity demand of the UER's consumers is constantly exceeding the introduction of proper power capacities, generating a substantial power shortage in the power systems. Within the system of the most important measures for intensification of the UER's industry in the 12th 5-year Plan, it is necessary to make provision for an increase in the reliability and quality of the power supply, for the establishment of a reserve capacity, for the technical reoutfitting of the TES's and for teh dismatling of low-efficiency equipment. It is advisable to concentrate attention on completion of the construction of the Perm GRES, on the incorporation of the capacities of the Bashkir, Yuzhnouralsk and Beloyarsk AES's, on the construction and expansion of the region's TETs's and on the construction and activation of a number of 500 and 1500 kV power transmission lines to the UER. Likewise important is the fulfillment in the current 5-year plan of the necessary studies and planning work for new AES's and ATETs-TETs's.

With what should the reorganization of the work on the reoutfitting of industry, including the UER's industry, begin? The answer to this question was given by M. S. Gorbachev in a report to a meeting in the CPSU Central Committee on 11 Jun 85 on the questions concerning the acceleration of scientific and technicla progress: "It is necessary to begin with the main item -- with a radical change in the investment and structural policies... It is important to abandon, without hesitation, the management stereotypes laid down in the past, under which the basic method for expansion of production was considered to be new construction and, at that time, since many enterprises that had been operating for many years had not been reoutfitted with new equipment, as the saying goes, they squeezed out of them everything possible and returned very little to them." (Footnote 2) (M. S. Gorbachev, "Korennoy vopros ekonomicheskoy politiki partii. Doklad na soveshchanii v TsK KPSS po voprosam uskoreniya nauchno-tekhnicheskogo progressa 11 iyunya 1985 goda," [The Basic Question of the Economic Policies of the Party. A Report at a Meeting in the CPSU Central Committee on the Questions Concerning the Acceleration of Scientific and Technical Progress on 11 June, 1985], Moscow, Politizdat, 1985, p 10] These words very accurately describe the situation, including that existing in the UER. Research has indicated that already in the 12th 5-year Plan it is necessary to increase in the region the amount of investments intended for renovation and technical reoutfitting, as a minimum, to up to 60 percent of the volume of industrial capital investments. And this is realistic, and yet, not easy. It remains to place into action all the reserves in capital construction and to increase the quality of planning decisions. An important factor in the increase in the result

yield of the investment process is the reduction in the length of the investment cycle (primarily the construction period), as well as the completion of projects under construction within the planned time frames.

In M. S. Gorbachev's report at the 27th CPSU Congress it is stated: "We will not be able to achieve the modernization of equipment without a basic improvement in capital construction. And this requires raising the entire construction complex to new industrial and organizational levels, cutting the investment cycle at least in half for both the modernization of enterprises and the construction of new projects." (Footnote 3) (PRAVDA, 1986, 26 February)

The concentration of efforts on a limited number of projects and the establishment within the territorial main construction administrations of mobile, general-purpose construction organizations will ensure an uninterrupted and balanced workload for the construction organizations, the removal of peak loads, an improvement in the use of production capacities and a reduction in production costs. There are also other factors for increasing the efficiency of the construction business. It is necessary to eliminate the traces of overextension of centralized capital investments which was tolerated in the past. Under the new management conditions it is necessary to determine the priority order of the enterprises (associations) in the conduct of large-scale modernization work, which requires the efforts of all the participants in the investment process. However, it is impossible to confine oneself to this: the economic strategy provides for the technical reoutfitting of all the industrial units and, equally, for the development of the social infrastructure as well. Each industrial enterprise (association) has available the means for the realization of these tasks (the use of the resources of the industrial development funds, the funds for social and cultural measures and housing construction, as well as bank credits).

The assignment of the capital investments alloted in the plan will ensure the proportional development of the basic assets of the sectors of the national economy. For this it is necessary to have conformity between the needs of the sectors and the resources of the construction organizations. The disruption of this interdependence causes a lack of balance in the national economy. A similar situation has arisen in the UER. The level of exploitation of the capital investments in industry here is significantly lower than what is needed. Under such correlated conditions the replacement of outdated labor resources was being delayed. This applies not only to industrial construction, but also to social, cultural and personal services projects as well. The reason for the discrepancy between construction capacities and their objectively necessary level is the passive attitude of some industrial ministries towards the technical reequipping of the enterprises. Carrying out the modernization and technical reequipping in necessarily beyond the present-day capabilities of the contract organizations, but rather requires the complete replacement of worn-out equipment. This is one of the principles for the stable development of the industrial process. It is not necessary to cite the inadequate capacities of the construction organizations to the industrial ministries but jointly with the Ministry of Heavy Construction, the Ministry of Industrial Construction and other departments to expand them, at the same time increasing their internal reserves for the uninterrupted increase in the technical level of the means of

ral part of the draft of the State Plan in accordance with the formats, indicators and in the order established by the USSR Gosplan. The organizational, scientific and procedural supervision of the preparations of the drafts of the complete plans for the development of the UER should be entrusted to the staff of the USSR Gosplan's authorized representative for the Ural Economic Region and to the Economics Institute of the USSR Academy of Sciences' Ural Scientific Center.

COPYRIGHT: Izdatelstvo "Ekonomika", "Planovoye khozyaystvo", 1986.

12752

CSO: 1820/136 - END -

# END OF FICHE DATE FILMED Sept 23, 1986